

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002137A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G02F1/1334 G02F1/1333

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 08, 29 September 1995 (1995-09-29) -& JP 07 134288 A (DAINIPPON PRINTING CO LTD), 23 May 1995 (1995-05-23) abstract; figure 1	1, 3, 5-8, 18, 23, 24, 28-34, 43, 48, 49
X		2, 4, 19-22, 25, 47, 50
Y		9-17, 35-42
	---	-/--

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

14 September 2004

Date of mailing of the international search report

11/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kentischer, F

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/IB2004/002137

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 486 932 B1 (NAKAO KENJI ET AL) 26 November 2002 (2002-11-26) abstract figures 1,4A-4C column 8, line 55 -column 9, line 17 column 11, line 19 -column 12, line 39	23, 26-30, 34, 43-46, 48,49
X Y A	---	25,50 35-42 1,3,4, 6-8, 18-21,24
X	US 6 181 393 B1 (SHIMIZU SEIZABURO ET AL) 30 January 2001 (2001-01-30) abstract figures 1,4A-8,14A,15,17,18 column 4, line 1 -column 6, line 26 column 8, line 14 -column 10, line 47 column 15, line 24 -column 16, line 60 column 19, line 59 -column 21, line 17 column 22, line 63 -column 24, line 67 column 30, line 12 - line 41 column 31, line 13 - line 39 column 37, line 50 -column 39, line 47	51
X Y A	---	52-54 12-14, 38,39 1,3,4,8, 9,15,18, 19,21, 23, 28-30, 34,35, 40,43, 44,46, 48,49, 53,54
Y	GB 2 226 174 A (PHILIPS ELECTRONIC ASSOCIATED) 20 June 1990 (1990-06-20) the whole document	9,15,35, 40
Y	US 4 781 444 A (ITOH SHINJI ET AL) 1 November 1988 (1988-11-01) the whole document	10,11, 16,17, 36,37, 41,42
A	US 2002/126249 A1 (LI WEIJIN ET AL) 12 September 2002 (2002-09-12) abstract figures 5A1-5C1,8A-8H ---	5,31
	--- -/--	

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002137

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 435 047 A (FERGASON JAMES L) 6 March 1984 (1984-03-06) the whole document -----	47

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/002137

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 07134288	A	23-05-1995	NONE	
US 6486932	B1	26-11-2002	JP 2000206515 A KR 2000035416 A TW 498179 B US 2002001053 A1	28-07-2000 26-06-2000 11-08-2002 03-01-2002
US 6181393	B1	30-01-2001	JP 3406855 B2 JP 11249119 A	19-05-2003 17-09-1999
GB 2226174	A	20-06-1990	NONE	
US 4781444	A	01-11-1988	JP 60184201 A JP 1594306 C JP 2018400 B JP 60184696 A DE 3586602 D1 DE 3586602 T2 EP 0154442 A2	19-09-1985 14-12-1990 25-04-1990 20-09-1985 15-10-1992 28-01-1993 11-09-1985
US 2002126249	A1	12-09-2002	CA 2434222 A1 CN 1363849 A EP 1352289 A2 JP 2004521377 T WO 02056097 A2 US 2003169387 A1 US 2004169813 A1	18-07-2002 14-08-2002 15-10-2003 15-07-2004 18-07-2002 11-09-2003 02-09-2004
US 4435047	A	06-03-1984	AT 60526 T AU 567868 B2 AU 1201583 A BR 8207867 A CA 1186502 A1 DE 3280302 D1 EP 0088126 A1 EP 0268877 A2 GB 2128626 A , B HK 42789 A HK 78191 A JP 6051284 A JP 2013528 C JP 4305620 A JP 7009512 B JP 3052843 B JP 58501631 A KR 9700345 B1 SG 11089 G SU 1620056 A3 WO 8301016 A1 US 4884873 A US 5082351 A US 4606611 A US 4616903 A US 4707080 A US 5089904 A US 4605284 A US 4579423 A US 4810063 A	15-02-1991 10-12-1987 06-09-1984 30-08-1983 07-05-1985 07-03-1991 14-09-1983 01-06-1988 02-05-1984 09-06-1989 11-10-1991 25-02-1994 02-02-1996 28-10-1992 01-02-1995 13-08-1991 29-09-1983 08-01-1997 29-09-1989 07-01-1991 31-03-1983 05-12-1989 21-01-1992 19-08-1986 14-10-1986 17-11-1987 18-02-1992 12-08-1986 01-04-1986 07-03-1989

Information on patent family members

PC1/IB2004/002137

Form PCT/ISA/210 (patent family annex) (January 2004)